

DOCUMENT RESUME

ED 080 614

TM 003 133

AUTHOR Pedrini, D. T.; Pedrini, Bonnie C.
TITLE An Evaluation of and a Detail-Profile for the
Vineland Social Maturity Scale.
PUB DATE [73]
NOTE 24p.
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Behavior Rating Scales; Clinical Diagnosis;
Evaluation; Interviews; *Mentally Handicapped;
*Preschool Children; Profile Evaluation; *Scoring;
*Social Maturity; Test Reviews
IDENTIFIERS *Vineland Social Maturity Scale

ABSTRACT

The Vineland Social Maturity Scale (VSMS) is a good measure of adaptive behavior for the pre-school child or the retardate of pre-school ability. It is an excellent clinical technique. It is more than a questionnaire and more than a rating scale. We recommend it as an interview and behavior-observation scale. We recommend it for treatment (developmental, corrective, remedial, training, and educational) purposes. The VSMS has a long history and appears to have inspired many other scales. Considered in this paper are strengths and weaknesses of the VSMS and a detail profile to help in interpretation and treatment. (Author/DB)

ED 080614

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE-
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

AN EVALUATION OF AND A DETAIL-PROFILE FOR
THE VINELAND SOCIAL MATURITY SCALE

D. T. Pedrini and Bonnie C. Pedrini

University of Nebraska at Omaha, Omaha, Nebraska 68101

Abstract

The Vineland Social Maturity Scale (VSMS) is a good measure of adaptive behavior for the pre-school child or the retardate of pre-school ability. It is an excellent clinical technique. It is more than a questionnaire and more than a rating scale. We recommend it as an interview and behavior-observation scale. We recommend it for treatment (developmental, corrective, remedial, training, and educational) purposes. The VSMS has a long history and appears to have inspired many other scales. Considered in this paper are strengths and weaknesses of the VSMS and a detail profile to help in interpretation and treatment. A Table of Contents follows.

TM 003 133

AN EVALUATION OF AND A DETAIL-PROFILE FOR
THE VINELAND SOCIAL MATURITY SCALE

Table of Contents

	Page-Number
Introduction.....	3
Interviewing and Scoring.....	3
Standardization.....	7
Items and Categories.....	9
Language Stereotypes.....	12
<u>VSMS</u> and Other Scales	12
Scatter and Profiles	13
References.....	17
Table 1, Suggested Order of Discussion	
Within and Among <u>VSMS</u> Areas	21
Table 2, Vineland Age Scale: Items	
and Scores.....	22
Table 3, Detail Profile: <u>VSMS</u> Areas,	
Items, Scores, and Corresponding SA's	23
Table 4, Detail Profile (continuation).....	24

AN EVALUATION OF AND A DETAIL-PROFILE FOR THE VINELAND SOCIAL MATURITY SCALE

Doll (1947, 1953, 1965) in his Vineland Social Maturity Scale attempts to measure social maturity, intelligence, and competency. This technique has a history of indebtedness (Doll, 1953, pp. 4-9), but nonetheless made a unique contribution in the year it was first published (Doll, 1935a, 1935b, 1935c). Personal-social maturation is an area of critical importance when one works with children and/or retardates. The American Association on Mental Deficiency in earlier Manuals (Heber, 1959, 1961b) and especially in its current Manual (Crossman, 1973, pp. 11-21) stresses the importance of adaptive behavior in an evaluation of retardation. Heber (1961b, p. 61) further states that "The Vineland Social Maturity Scale is perhaps the best single measure of Adaptive Behavior currently available." This was undoubtedly true, though other scales are now available and are being researched (Buros, 1961, 1965, 1972).

Interviewing and Scoring

The VSIS may be administered according to standard procedures (Doll, 1953, pp. 266-283, et passim) or according to special procedures (Doll, 1953, pp. 291-298, 471, et passim). If administered according to special procedures, Doll (1953, p. 291) says, "...such results should be cautiously interpreted since normative data and correlative evidence on reliability, validity, and probable error of measurement have not yet been systematically established." Departures from standard

procedures, then, should be avoided if possible. The standard procedure mentioned by Doll (1953, pp. 347-358) in his normative standardization ($n = 620$) did not appear to include the presence of the subject under discussion. Therefore, Doll (1947; 1953, pp. 3, 268, 449, 459; 1965) not only allows the examination of a subject in absentia (also called indirect examination), but he recommends it. In fact, he states that "...to know or to see the subject...usually prejudices the examination." (Doll, 1953, p. 268) This is possible, but hopefully the skilled examiner should have had better training and education, and if so could turn his knowledge to advantage. Also, the informant is a major variable of true and/or error variance. How is one to differentiate? by ascertaining the knowledgeability (validity?) and veracity (reliability?) of the informant! How many times have we heard, "Oh, I didn't know he could do that." And, informants are usually emotionally involved with the subjects and many lose their objectivity. We should not expect otherwise. Internal consistency procedures (within the Scale) are helpful, but external consistency procedures (seeing the subject perform) are better. The informant and/or the interviewer can work with the subject and thereby improve the data collection. After all, we are interested in what the subject does, and not just what the informant says he does. The "burden of proof" is on the interviewer.

Doll (1953, pp. 271-276) gives a few good examples of interview-discussion, and that format should be followed in questioning. A Vineland interviewer would do well to formulate general-discussion questions dealing with specific series of items. This technique is easier to learn by example, rather than by precept. (See Table 1.)

An approximate level for discussion may be quickly established in an area (or category) depending upon apparent (verbal-informant or performance-subject) abilities. Then the interviewer generally proceeds up and/or down to establish a basal and a maximal within the area (or category). We generally recommend, as mentioned previously, basals and maximals of three rather than two. Starting around an assumed-basal is preferable to starting around an assumed-maximal following generally established psychometric procedure. If one has knowledge of the subject's approximate mental age or approximate social age, one could start about 10 to 20 item-points lower. In this way, general discussion with regard to item series may be started near the basal.

One problem is item seriation, i.e., the occasional inclusion of a high-level item among low-level items or vice versa. The single item in question might establish a response-set that would not be appropriate. This is easy to overcome, however, by establishing referents as to item-difficulty and often this is done by the informant. Only if the informant appears to misinterpret what is intended does the interviewer have to re-establish the appropriate referents.

The knowledgeable and veracity (accuracy, precision, etc.) of the informant should be evaluated not just for the overall Scale but for areas (or categories). This does not mean that one has to check everything, but one should check enough items in areas (or categories) to ascertain objectivity. Kantian "noumena" and "phenomena" should converge on the Vineland.

The Vineland scoring instructions are somewhat ambiguous for the "plus no opportunity" (+NO) value. If a client has the following

consecutive scores +, +NO, +, of course the +NO = 1 in value; -, +NO, -, of course the +NO = 0 in value; or +, +NO, -, of course the +NO = .5 in value. But what about +, +NO, ±? or -, +NO, ±? or ±, +NO, ±? Or what about reversals of the examples just cited? Or what about multiple consecutive +NO's? Doll (1964) recommends considering the range of scores before assigning a numerical value to +NO. In the protocols of most clients, the problems cited would appear rarely. However, with retardates the +NO score seems to appear more than rarely (Doll, 1953, pp. 409-410). This might also be true of special-education or special-psychology problem clients (parents or children).

Doll (1953, p. 287) suggests at least two plus scores (basal) and two minus scores (maximal) at the beginning and end of each category, respectively. We would recommend at least three of each, especially when working with retardates (or special-problem clients?) for as Doll (1953, pp. 412-413) has indicated, they appear to scatter nearly twice as much as his normative group.

In Doll's book (1953, p. 290) and condensed manual (1947, 1965), social ages listed in terms of months or years-and-months (base 12) would have been helpful, not just social ages listed in terms of decimals or years-and-decimals (base 10). Doll (1953, p. 291) gives a rationale for inclusion of decimals rather than months, but months or years-and-months are more comparable to other intelligence scales, measured or adaptive. One can convert the social-age decimal tables to months and then write in the appropriate values. Social ages of .01, .06, .09, .1 and .12 = 1 month; .15, .18 and .2 = 2 months; .21, .24, and .26 = 3 months; .3, .32, and .35 = 4 months; .38, .4,

.41, and .44 = 5 months; .47, .5, and .53 = 6 months; .56, .59, .6, and .62 = 7 months; .65, .68, and .7 = 8 months; .71, .74, .77, .79, and .8 = 9 months; .8, .83, and .85 = 10 months; .89, .9, .91, .94 = 11 months; and .97, 1.0, and 1.02 = 1 year.

The condensed manual of directions has a long history (Doll, 1936b, 1947, 1965) and it should be revised and brought further up to date. This could be done, for example, by abstracting parts of Chapters 1, 4, 6, and 7 of Doll's (1953) book. At a minimum, the more detailed scoring procedures in Chapter 7 should be included in a new condensed manual. This would be very helpful to examiners who use the condensed manual (Doll, 1947, 1965) during interview procedures and the book (Doll, 1953) as a resource.

Standardization

There is the problem of cultural bias, but not only for the Vineland Social Maturity Scale (Doll, 1953, pp. 38-389, 487-505). The person of low socio-economic status or from a culturally-disadvantaged family might not do as well on the Vineland. Conversely, a person of high socio-economic status or from a culturally-advantaged family might do better. The questions of cause and effect, capacity and ability, biology and sociology, nature and nurture, basic and apparent differences are important here. No psychological test measures so-called innate intelligence. The culture-free tests are a misnomer. The culture-fair tests allot higher scores for the culturally disadvantaged, relative to the more usual tests. But, the culture-fair tests also allot higher scores for the culturally advantaged, relative to the culturally disadvantaged (Anastasi, 1968). The problems of cultural bias are being considered, but they have not been solved.

The normative standardization of the current form of the Vineland Social Maturity Scale dates back to the middle 1930's. The results of the standardization were published and discussed by Doll (1936a, 1953, Ch. 1, 9). However, no new standardization has been done. Many studies have been published and are listed (Buros, 1938, 1949, 1953, 1959, 1965, 1972; Doll, 1953, 1965). But a re-standardization of the Vineland has not been attempted. Doll (1936a) himself called his original standardization a "preliminary standardization." And, Doll (1953, Ch. 6) indicates the weaknesses of some of his items. The original standardization group included 620 persons: 10 male and 10 female at each year level from 0-1¹, 1-2 to 30-31 years-of-age from the environs of Vineland, N.J. only. A new standardization of the Vineland is needed.

In this event, deviation social-quotients rather than ratio social-quotients should be computed. For the 620 "normals" in the original standardization group, the mean social-quotient ranged from 80 to 112 points, and the standard-deviation social-quotients ranged from 6 to 50 points (Doll, 1953, pp. 376-380). Even if one rules out the below one-year infants, the mean social-quotients ranged from 95 to 112 points, and the standard-deviation social-quotients ranged from 6 to 17 points. The normative social-quotients between ages need to be relatively equated in value, both for means and standard deviation if the results are to have comparability. Statistical reality may not be real reality, but it can be helpful. The Stanford-Binet with its long history

¹The denotations for his specially abstracted infant-group (n = 14/20) as listed in Table 5B (Doll, 1953, p. 379) are inaccurate.

of ratio intelligence-quotients (Terman, 1916; Terman & Merrill, 1937; McNemar, 1942) finally changed to deviation intelligence-quotients (Terman & Merrill, 1960, 1973; Pinneau, 1961). The Vineland in its next standardization should do likewise.

Items and Categories

Item inclusion on the Vineland ranges from thirty-four items at year 0-I to three items at year IX-X to twelve items at year XXV+. This is true if one evaluates the Vineland as an age scale. Doll (1953, pp. 48-53) claims age or year-scale and point-scale advantages for the Vineland. A better balance is needed year-by-year in terms of number of items and kind of items.

For one point, the Vineland scoring system gives about one-month of social age at the lower levels, but about one-year of social age at the upper levels. In other words, there is not enough sampling of ability at the upper levels. Hence "...at the pre-school level, the Vineland Social Maturity Scale is fairly adequate as a measure of Adaptive Behavior." (Heber, 1961b, p. 63) It may need some supplementing, but not supplanting. But, achievement tests are definitely needed and recommended at the school-age level; and at the adult level, social and vocational judgments in a family and community context are recommended. In essence, then, one can infer that the Vineland appears most useful for the pre-school child or the retardate of pre-school ability.

The inclusion of a separate Self-Help general-activities category is of doubtful value (Pedrini & Pedrini, 1966). The items of this category could be included in the other categories. Herein, factor

seventeen), however, are high when one considers the retardate's range of abilities. In other words, for retardates, item analysis above item seventy-five is not as important or adequate as item analysis of seventy-five and below. If the "retardate" scored much higher, would he be retarded? The questionable aspect of this kind of item analysis is the confounding of criteria and test, input and output, background and foreground. Doll uses social-age means for the retarded in contrasting item difficulty, in assessing item discrimination. The relationship is directly dependent and correlated, yet this is not taken into account statistically. In defense, one might say that life age is also related to social age and the Scale items, so what difference does it make if one uses social-age means for the retardates? The difference is that the items directly cumulate to give social age, not life age. External criteria are better than internal criteria.

In considering item analysis and validation through between-group procedures, Doll (1953, pp. 401-406) contrasts items for life-age means of "normals" and social-age means of retardates. The criticism mentioned for the item analysis of protocols of retardates applies here.

One might question the use of critical ratio (CR), a rather old-fashioned and infrequently used statistic, in the various item analyses of the Scale (Doll, 1953, pp. 71-259, 366-367, 372, 402, 406). Despite its limitations, however, CR is still acceptable "witchcraft." Appropriate significant-difference tests of one kind or another should be applied in the item analyses between years, sexes, and other groupings. Correlation coefficients would also add to the analyses, however, and should be included in the next standardization.

Language Stereotypes

One might be tempted to criticize the language used in parts of Doll's 1953 book--for example, feeble-minded, idiot, imbecile, moron--till one realizes the publication date. This was common language prior to the official adoptions of terminology by the American Association on Mental Deficiency (Heber, 1959, 1961a, 1961b). Periodically it is good to rid our language of stereotypes that are used against persons, such as moron, etc. Such language stereotypes have surplus psychological and social meaning above and beyond what ought to be intended.

VSMS and Other Scales

The Vineland, despite its limitations, is an excellent clinical technique. It is more clinical than psychometric in nature, even though the Vineland results in quantitative scores. It is more than a questionnaire and more than a rating scale. It can be an interview and behavior-observation scale. The interview technique is ideal for obtaining data relevant for counseling and remediation. The behavior-observation technique is ideal for assessing interview-validity and social-interaction.

The VSMS appears to have inspired many other scales, some of which are included in the redoubtable Buross books. Others may be found, e.g., in Cumulated Index Medicus; Education Index; ERIC (Educational Resources Information Center), including CLJE (Current Index to Journals in Education) and RIE (Research in Education); Excerpta Medica, especially in psychiatry and in pediatrics; Psychological Abstracts; and Psychological Bulletin.

The number and quality of studies generated by the scale, or at least the number of studies which include the scale may give some notion as to its value. Some scales (especially self-report techniques) remain vainglorious attempts to extend the self rather than attempts to contribute to the science and art of psychology (not so the Vineland). And some scales seem to markedly penalize subgroups in our culture, without adequate justification. (For a discussion, see Pedrini & Pedrini, 1972, 1973a.) Doll's VSMS (1953, passim) seems much fairer since it deals with adaptive behavior (or social competency), an antidote to narrow IQ testing. (As an illustration, see Grossman, 1973, pp. 13-14.)

Scatter and Profiles

What of scatter analysis in the Vineland? As an analogy, Rapaport, Gill, and Schafer (1945, pp. 48-78, 551-558, et passim; Holt, 1968, pp. 161-171, et passim) discuss various kinds of scatter analyses in the Wechsler Scales. Cronbach (1960) warns that "Only unusually large differences between subtests (greater than 3 scaled-score units) should be taken seriously." Wechsler (1944, pp. 149, 152-153; 1958, p. 170) discusses the computation of deviations from a mean as well as "hard" and "soft" signs. Seybold and Pedrini (1964) discuss the problems of applying these criteria to protocols of persons with borderline or retarded intelligence. Wechsler in his earlier book (1944, p. 149) shows how to compute the deviation scores for borderlines and retardates, but in his later book (1958), he does not include the procedure. Nor is it included by Matarazzo (1972).

The same analogous problems are apparent for the Binet Scales (Rapaport, Gill, & Schafer, 1965, pp. 42-43, 548-552; Holt, 1968, pp. 74-80, 158-160) and the Vineland, only in terms of quotient scores (IQ or SQ) rather than subtest scores. Doll (1953, p. 500) mentions the convention of considering "...less than 1 SD as not significant and more than 2 SD as significant, with due regard for sampling and other allowances." (SD means standard deviation.) But, the SD varies year by year on the Vineland (though not on the S-B L-M), as mentioned previously. What point values should one consider? Should it be the point values for the separate life ages? Should one assume 16 points for 1 SD following the S-B L-M? (Doll already follows the Binet for life-age computation: for 16+ days, one gives the next month.) Should one assume 15 points for 1 SD following the Wechsler Scales?

Again, the problems are even more complicated in working with the retarded. The retarded's overall scores are much lower in value. If one needs 30 or 32 points for 2 SD's, significant deviations will in most cases be eliminated. There would be few rejections of the null hypothesis (between extreme items and the mean of the person's scores) and this might be unrealistic. One could, if the year-by-year SD's were the same for SQ's (as in the S-B L-M and the Wechsler Scales), scramble, compute a ratio, and thereby theoretically arrive at a significant-deviation value. On the S-B L-M, for example, the obtained IQ is to 100, as X (unknown 2 SD) is to 32 (2 SD). Using an illustration, suppose we obtained an IQ of 60 on the L-M: $60/100 = X/32$, therefore $X = 19$. For 20 or more points, then, we would have

a significant deviation (more than 2 SD) of that subtest versus the cumulative IQ. We are, in effect, assuming linearity and this is unwarranted. And, the S-B L-M subtests within-age-levels are not in order of difficulty, though one could list them as such in terms of item standardization (Terman & Merrill, 1960, pp. 342-347; see also T & M, 1973).

At a minimum, the Vineland does not even have the same SD value between life ages and therefore we are heaping Pelion upon Ossa. These techniques are "not acceptable witchcraft." We suspect that the true value of significant-deviation for the person would be somewhere between the absolute-group-mean and the relative-individual-mean discussed above. What we need is statistical-clinical "accentable witchcraft." We need mathematical statisticians who are interested in and understand individual tests and measurements. Some combination of description and inference, sampling and probability, experimental design and statistical methodology, mathematics and reasonableness is called for. This should not be too difficult a task if the mathematical statisticians logically follow the theoretical Gaussian distribution and the calculus of probability.

The notion of profile analysis is not new as a general concept for psychometric and projective testing or as a specific concept for the Vineland. In his book, Doll (1953, p. 577) lists a profile that was developed by Myer. Pedrini and Pedrini (1966) have rearranged categories into areas. The word "areas" is used since the Self Help general-activities category has been eliminated and items shifted (see Table 1). The area and item sequences follow logic and reasonableness as we see it. What is needed, however, is probability.

Pedriní and Pedriní (1973b) also presented an efficient, short, summary profile. A detail profile is now included (different from the above) in Tables 3 and 4. Table 4 can fit under Table 3 to make one continuous record, combining point scale and age scale characteristics. Note that the first and last columns list the social age (SA) equivalents. Space is available to record the specific scores for each applicable item. This allows ready reference to variability within, between, and among areas. At this time, one should not attempt to quantify such variability because of all the vagaries noted above. Nonetheless, the listing can be very helpful in noting the minuses within pluses or vice versa, the no-opportunity or plus-minus scores, within and between areas. This kind of information could be very helpful in counseling, in therapy, in teaching, in programming, etc. The beauty of the VSMS is that it lends itself directly to adaptive or competency behavior.

Table 2 is a listing of the Vineland items (and eventually scores) as an age scale rather than as a point scale. This kind of listing could be helpful for general and normative information. Hopefully, however, the focus of the Vineland will be ipsative treatment.

References

- Anastasi, Anne. Psychological testing. New York: Macmillan, 1968, pp. 250-254.
- Buros, O. K. (Ed.) The nineteen thirty eight mental measurements yearbook. New Brunswick, N. J.: Rutgers Univ., 1938.
- Buros, O. K. (Ed.) The third mental measurements yearbook. New Brunswick, N. J.: Rutgers Univ., 1949.
- Buros, O. K. (Ed.) The fourth mental measurements yearbook. Highland Park, N. J.: Gryphon, 1953.
- Buros, O. K. (Ed.) The fifth mental measurements yearbook. Highland Park, N. J.: Gryphon, 1950.
- Buros, O. K. (Ed.) Tests in print. Highland Park, N. J.: Gryphon, 1961.
- Buros, O. K. (Ed.) The sixth mental measurements yearbook. Highland Park, N. J.: Gryphon, 1965.
- Buros, O. K. (Ed.) The seventh mental measurements yearbook. Highland Park, N. J.: Gryphon, 1972.
- Cronbach, L. J. Essentials of psychological testing. New York: Harper, 1960, p. 201. See also the 3rd ed., 1970, p. 224.
- Doll, E. A. A genetic scale of social maturity. American Journal of Orthopsychiatry, 1935, 5, 180-188. (a)
- Doll, E. A. The measurement of social competence. Proceedings of the American Association on Mental Deficiency, 1935, 40, 103-123. (b)
- Doll, E. A. The Vineland Social Maturity Scale. Training School Bulletin, 1935, 32, 1-7, 25-32, 48-55, 68-74. (c)
- Doll, E. A. Preliminary standardization of the Vineland Social Maturity Scale. American Journal of Orthopsychiatry, 1936, 6, 283-293. (a)

- Doll, E. A. The Vineland Social Maturity Scale. Revised condensed manual of directions. Vineland, N.J.: The Training School, 1936. (b)
- Doll, E. A. Vineland Social Maturity Scale. Manual of directions. Minneapolis: Educational Test Bureau, American Guidance Service, 1947.
- Doll, E. A. The measurement of social competence. Minneapolis: Educational Test Bureau, American Guidance Service, 1953.
- Doll, E. A. Personal communication, 1964.
- Doll, E. A. Vineland Social Maturity Scale. Condensed Manual of Directions. Minneapolis: Educational Test Bureau, American Guidance Service, 1965.
- Grossman, H. J. Manual of terminology and classification in mental retardation. Washington, D. C.: American Association on Mental Deficiency, 1973.
- Guilford, J. P. The structure of intellect. Psychological Bulletin, 1956, 53, 267-293.
- Heber, R. (Ed.) A manual on terminology and classification in mental retardation. (1st ed.) American Journal of Mental Deficiency, Monograph Supplement, 1959.
- Heber, R. Modification in the manual on terminology and classification in mental retardation. American Journal of Mental Deficiency, 1961, 65, 499-500. (a)
- Heber, R. (Ed.) A manual on terminology and classification in mental retardation. (2nd ed.) American Journal of Mental Deficiency, Monograph Supplement, 1961. (b)

- Holt, F. R. (Ed.) Diagnostic psychological testing by Rapoport, Gill, and Schafer. (Rev. ed.) New York: International Universities Press, 1968.
- Matarazzo, J. D. Wechsler's measurement and appraisal of adult intelligence. Baltimore: Williams & Wilkins, 1972.
- McNemar, Q. The revision of the Stanford-Binet scale. Boston: Houghton Mifflin, 1942.
- Pedrini, Bonnie C., & Pedrini, D. T. Classifying exceptional children and adolescents. 1972. 8 pages. EDRS order number ED 064 839. ERIC Clearinghouse on Exceptional Children, EC 042 573. Abstract in PIE, 1972.
- Pedrini, Bonnie C., & Pedrini, D. T. Intelligent intelligence testing. 1973. 7 pages. EDRS order number ED 060 694. ERIC Clearinghouse on Tests, Measurement, and Evaluation, TM 002 145. Abstract in PIE, 1973. (a)
- Pedrini, D. T., & Pedrini, Bonnie C. Vineland social maturity scale profile. Unpublished paper, 1973. (b)
- Pedrini, D. T., & Pedrini, Lura N. The Vineland Social Maturity Scale: Recommendations for administration, scoring and analysis. Journal of School Psychology, 1966, 5, 14-20.
- Pinneau, S. R. Changes in intelligence quotient, infancy to maturity. Boston: Houghton Mifflin, 1961.
- Rapoport, D., Gill, M., & Schafer, R. Diagnostic psychological testing. Vol. 1. Chicago: Year Book Publishers, 1949.
- Seybold, F. R., & Pedrini, D. T. The relation between Wechsler-Bellevue subtests and academic achievement using institutionalized retardates. Psychiatric Quarterly, 1964, 38, 635-650.

Terman, L. M. The measurement of intelligence. Boston: Houghton Mifflin, 1916.

Terman, L. M., & Merrill, Maud A. Measuring intelligence. Boston: Houghton Mifflin, 1937.

Terman, L. M., & Merrill, Maud A. Stanford-Binet Intelligence Scale. Boston: Houghton Mifflin, 1960. Newly normed in 1973.

Wechsler, D. The measurement of adult intelligence. Baltimore: Williams & Wilkins, 1944.

Wechsler, D. The measurement and appraisal of adult intelligence. Baltimore: Williams & Wilkins, 1958.

Table 1

SUGGESTED ORDER OF DISCUSSION WITHIN AND AMONG VSMS AREAS

1. The examiner talks with the informant and works with the client in an informal setting. A verbatim account of the interaction is recorded. As much as possible, the examiner should be less directive rather than more directive.
2. In lieu of method one, the Vineland should be administered as a point scale with the areas in the following order:

- (a) For a child, adolescent or adult:

- I, II, III, IV, V, VI, VII, VIII.

- (b) For an infant:

- III, IV, VI, V, I, II, VII, VIII.

The discussion should begin in general terms. If an examiner has to be specific too often, the collection of data is forced and mechanical. Rather than conversational, the data collection becomes question-and-answer, and this does not allow for spontaneity. A verbatim account of the interaction should be recorded and this includes the examiner's statements, not just the informant's answers. A "short-hand" system or recording would be very helpful. Area VIII does not exist per se; it is a reminder to ask "Are there any other things that you wish to mention about _____? Does he present any (other) special problems?"

I. Drinking, Eating; twelve items:

11, 25, 39, 16, 20, 28, 30, 33, 38, 62, 67, 75

II. Dressing, Cleansing; fifteen items:

21, 37, 35, 51, 50, 52, 40, 42, 47, 54, 70, 86, 64, 74, 65

III. Moving, Walking; sixteen items:

2, 5, 3, 6, 13, 8, 12, 9, 15, 18, 23, 26, 29, 32, 45, 41

IV. Communicating; Understanding, Speaking, Reading, Writing; sixteen items:

1, 10, 17, 31, 34, 44, 58, 63, 66, 79, 73, 78, 81, 84, 90, 91

V. Playing, Working; twenty-two items:

7, 36, 19, 55, 22, 43, 57, 71, 82, 24, 48, 72, 80, 89, 98, 106, 108, 111, 113, 114, 116, 107

VI. Relating, Socializing; seventeen items:

4, 14, 27, 46, 49, 56, 59, 68, 69, 85, 88, 103, 104, 109, 110, 115, 117

VII. Self-Directing, Buving; nineteen items:

53, 61, 77, 83, 92, 93, 96, 99, 60, 76, 87, 94, 95, 100, 102, 97, 101, 105, 112

VIII. ?

Table 2

VINELAND AGE SCALE: ITEMS AND SCORES

NAME: _____ Sex: _____ Date: _____
year month day

Informant: _____ Born: _____
year month day

Total Score S.A.: _____ S.Q.: _____ Life Age: _____
years-months years - months

- | | | |
|-----|-----|------|
| 1. | 40. | 79. |
| 2. | 41. | 80. |
| 3. | 42. | 81. |
| 4. | 43. | 82. |
| 5. | 44. | 83. |
| 6. | 45. | 84. |
| 7. | 46. | 85. |
| 8. | 47. | 86. |
| 9. | 48. | 87. |
| 10. | 49. | 88. |
| 11. | 50. | 89. |
| 12. | 51. | 90. |
| 13. | 52. | 91. |
| 14. | 53. | 92. |
| 15. | 54. | 93. |
| 16. | 55. | 94. |
| 17. | 56. | 95. |
| 18. | 57. | 96. |
| 19. | 58. | 97. |
| 20. | 59. | 98. |
| 21. | 60. | 99. |
| 22. | 61. | 100. |
| 23. | 62. | 101. |
| 24. | 63. | 102. |
| 25. | 64. | 103. |
| 26. | 65. | 104. |
| 27. | 66. | 105. |
| 28. | 67. | 106. |
| 29. | 68. | 107. |
| 30. | 69. | 108. |
| 31. | 70. | 109. |
| 32. | 71. | 110. |
| 33. | 72. | 111. |
| 34. | 73. | 112. |
| 35. | 74. | 113. |
| 36. | 75. | 114. |
| 37. | 76. | 115. |
| 38. | 77. | 116. |
| 39. | 78. | 117. |

Table 3
DETAIL PROFILE: VETS AREAS, ITEMS, SCORES, AND CORRESPONDING SA'S

SA	I	II	III	IV	V	VI	VII	SA
30+						117.		30+
30+					116.			30+
30+						115.		30+
30+					114.			30+
30+					113.			30+
30+							112.	30+
30+					111.			30+
29-0						110.		29-0
29-0						109.		29-0
27-0					108.			27-0
26-0					107.			26-0
25-0					106.			25-0
24-0							105.	24-0
23-0						104.		23-0
22-0						103.		22-0
21-0							102.	21-0
20-0							101.	20-0
19-8							100.	19-8
19-4							99.	19-4
19-0					98.			19-0
18-8							97.	18-8
18-4							96.	18-4
18-0							95.	18-0
17-6							94.	17-6
17-0							93.	17-0
16-6							92.	16-6
16-0				91.				16-0
15-6				90.				15-6
15-0					89.			15-0
14-5						88.		14-5
13-10							87.	13-10
13-2		86.						13-2
12-7						85.		12-7
12-0				84.				12-0
11-8							83.	11-8
11-4					82.			11-4
11-0				81.				11-0
10-10					80.			10-10
10-6				79.				10-6
10-4				78.				10-4
10-0							77.	10-0
9-8							76.	9-8
9-4	75.							9-4
9-0		74.						9-0
8-10				73.				8-10
8-6					72.			8-6
8-4					71.			8-4
8-0		70.						8-0
7-10						69.		7-10
7-7						68.		7-7
7-5	67.							7-5
7-2				66.				7-2
7-0		65.						7-0
6-10		64.						6-10
6-6				63.				6-6
6-4	62.							6-4
6-0							61.	6-0
5-10							60.	5-10
5-7						59.		5-7
5-5				58.				5-5
5-2					57.			5-2

Table 4

SA	I	II	III	IV	V	VI	VII	SA
4-10					55.			4-10
4-8		54.						4-8
4-6							53.	4-6
4-4		52.						4-4
4-2		51.						4-2
4-0		50.						4-0
3-10						49.		3-10
3-8					48.			3-8
3-6		47.						3-6
3-4						46.		3-4
3-2			45.					3-2
3-0				44.				3-0
2-11					43.			2-11
2-10		42.						2-10
2-8			41.					2-8
2-7		40.						2-7
2-6	39.							2-6
2-5	38.							2-5
2-4		37.						2-4
2-2					36.			2-2
2-1		35.						2-1
2-0				34.				2-0
1-11	33.							1-11
1-11			32.					1-11
1-10				31.				1-10
1-9	30.							1-9
1-9			29.					1-9
1-8	28.							1-8
1-7						27.		1-7
1-6			26.					1-6
1-6	25.							1-6
1-5					24.			1-5
1-4			23.					1-4
1-4					22.			1-4
1-3		21.						1-3
1-2	20.							1-2
1-1					19.			1-1
1-1			18.					1-1
1-0				17.				1-0
0-11	16.							0-11
0-11			15.					0-11
0-10						14.		0-10
0-9			13.					0-9
0-9			12.					0-9
0-8	11.							0-8
0-7				10.				0-7
0-6			9.					0-6
0-6			8.					0-6
0-5					7.			0-5
0-4			6.					0-4
0-4			5.					0-4
0-3						4.		0-3
0-2			3.					0-2
0-1			2.					0-1
0-1				1.				0-1